CLAIMS

What is claimed is:

1   1.   A method of performing serialization of at least a portion of an object model

2   comprising at least one namespace, comprising:

3   searching for an ancestor namespace based on a current namespace, the ancestor

4   namespace being associated with an ancestor prefix and an ancestor uniform resource

5   identifier (URI), the current namespace being associated with a current prefix and current

6   URI, such that the ancestor prefix matches the current prefix; and

7   when the current namespace is an implicit no default namespace and the ancestor

8   namespace is an explicit default namespace based on, at least in part, the ancestor prefix,

9   generating a serialized namespace declaration for the current namespace.

1   2.   The method of claim 1 wherein the serialized namespace declaration is a

2   serialized XML namespace declaration.

1   3.   The method of claim 1 wherein a stack stores the ancestor namespaces, and said

2   searching searches the stack for the ancestor prefix, and further comprising:

3   pushing the current prefix and current URI onto the stack.

1   4.   The method of claim 1 further comprising:

2   when no ancestor namespace has an ancestor prefix that matches the current

3   prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is

4   different from the current URI, generating a serialized namespace declaration for the

5   current namespace.

1   5.   The method of claim 1 wherein the object model is associated with a query,

2   further comprising:

3   preprocessing the query to identify any implicit no default namespaces.

1   6.   The method of claim 5 wherein said generating generates the serialized

2   namespace declaration when the implicit no default namespace is not a top constructor at

3   the top query block, wherein the serialized namespace declaration is a no default

4   namespace.

1   7.   The method of claim 1 wherein the object model comprises at least one element,

2   and a current tagging template represents the element, the tagging template having a

3   pointer to a previous namespace declaration in an ancestor tagging template, wherein said

4   searching searches for the ancestor namespace using the pointer.

1   8.   The method of claim 7 wherein the tagging template further comprises an

2   implicit-no-default indicator to indicate that a namespace declaration is implicit no

3   default, and

4   wherein said generating generates the serialized namespace declaration for the

5   implicit no default namespace when the implicit-no-default indicator indicates that the

6   current namespace is implicit no default.

1   9.   The method of claim 1 further comprising:

2   hashing the current prefix to an index of a hash anchor array, wherein said

3   searching accesses the hash anchor array for the ancestor namespace.

1   10.   The method of claim 1 further comprising:

2   passing a template-chaining data structure comprising a pointer to a previous

3   template-chaining data structure and also comprising a pointer to a namespace of a

4   template, wherein said searching uses said template-chaining data structure to find the

5   ancestor namespace declaration.

1   11.   An article of manufacture comprising a computer program usable medium

2   embodying one or more instructions executable by a computer for performing a method

3   of serializing at least a portion of an object model comprising at least one namespace, the

4   method comprising:

5   searching for an ancestor namespace based on a current namespace, the ancestor

6   namespace being associated with an ancestor prefix and an ancestor uniform resource

7   identifier (URI), the current namespace being associated with a current prefix and current

8   URI, such that the ancestor prefix matches the current prefix; and

9   when the current namespace is an implicit no default namespace and the ancestor

10   namespace is an explicit default namespace based on, at least in part, the ancestor prefix,

11   generating a serialized namespace declaration for the current namespace.

1   12.   The article of manufacture of claim 11 wherein the serialized namespace

2   declaration is a serialized XML namespace declaration.

1   13.   The article of manufacture of claim 11 wherein a stack stores the ancestor

2   namespaces, said method further comprising:

3   pushing the current prefix and URI onto the stack, wherein said searching

4   searches the stack for the ancestor prefix.

1   14.   The article of manufacture of claim 11, said method further comprising:

2   when no ancestor namespace has an ancestor prefix that matches the current

3   prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is

4   different from the current URI, generating a serialized namespace declaration for the

5   current namespace,

1   15.   The article of manufacture of claim 11 wherein the object model is associated

2   with a query, said method further comprising:

3   preprocessing the query to identify the implicit no default namespace.

1   16.   The article of manufacture of claim 15 wherein said generating generates the

2   serialized namespace declaration when the implicit no default namespace is not a top

3   constructor at a top query block, wherein the serialized namespace declaration is a no

4   default namespace.

1   17.   The article of manufacture of claim 11 wherein the object model comprises at

2   least one element, and a current tagging template represents the element, the tagging

3   template having a pointer to a previous namespace declaration in an ancestor tagging

4   template, wherein said searching searches for the ancestor namespace using the pointer.

1   18.   The article of manufacture of claim 17 wherein the tagging template further

2   comprises an implicit-no-default indicator to indicate that a namespace is implicit no

3   default, further comprising determining whether the current namespace is implicit no

4   default based on the implicit-no-default indicator.

1   19.   The article of manufacture of claim 11, said method further comprising:

2   hashing the current prefix to an index of a hash anchor array, wherein said

3   searching accesses the hash anchor array for the ancestor namespace.

1   20.   The article of manufacture of claim 11, said method further comprising:

2   passing a current template-chaining data structure comprising a pointer to a

3   previous template-chaining data structure and also comprising a pointer to the namespace

4   declaration of a template, wherein said searching uses said current template-chaining data

5   structure to find the ancestor namespace declaration.

1   21.   An apparatus for performing serialization of at least a portion of an object model

2   comprising at least one namespace, comprising:

3   a processor; and

4   a memory storing one or more instructions that:

5   search for an ancestor namespace based on a current namespace, the

6 ancestor namespace being associated with an ancestor prefix and an ancestor uniform

7 resource identifier (URI), the current namespace declaration being associated with a

8 current prefix and current URI, such that the ancestor prefix matches the current prefix;

9 and

10   when the current namespace is an implicit no default namespace and the

11 ancestor namespace is an explicit default namespace based on, at least in part, the

12 ancestor prefix, generate a serialized namespace declaration for the current namespace.

1 22.   The apparatus of claim 21 wherein the serialized namespace declaration is a

2 serialized XML namespace declaration.

1 23.   The apparatus of claim 21 wherein a stack stores the ancestor namespaces, and

2 further comprising one or more instructions that:

3   push the current prefix and URI onto the stack, wherein said instructions that

4 search searches the stack for the ancestor prefix.

1 24.   The apparatus of claim 21 further comprising one or more instructions that:

2   when no ancestor namespace has an ancestor prefix that matches the current

3 prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is

4 different from the current URI, generate the serialized namespace declaration for the

5 current namespace,

1 25.   The apparatus of claim 21 wherein the object model is associated with a query,

2 further comprising one or more instructions that:

3   preprocess the query to identify the implicit no default namespace.

1 26.   The apparatus of claim 21 further comprising one or more instructions that:

2   wherein said instructions that generate the serialized namespace declaration for

3   when the implicit no default namespace is not a top constructor at a top query block,

4   wherein the serialized namespace declaration is no default namespace.

1   27.   The apparatus of claim 21 wherein the object model comprises at least one

2   element, and a current tagging template represents the element, the tagging template

3   having a pointer to a previous namespace declaration in an ancestor tagging template,

4   wherein said one or more instructions that search searches for the ancestor namespace

5   using the pointer.

1   28.   The apparatus of claim 27 wherein the tagging template further comprises an

2   implicit-no-default indicator to indicate that a namespace is implicit no default, further

3   comprising one or more instructions that:

4   determine whether a namespace is implicit no default based on the implicit-no-

5   default indicator.

1   29.   The apparatus of claim 21 further comprising one or more instructions that:

2   hash the current prefix to an index of a hash anchor array, wherein said searching

3   accesses the hash anchor array for the ancestor namespace.

1   30.   The apparatus of claim 1 further comprising one or more instructions that:

2   pass a template-chaining data structure comprising a pointer to a previous

3   template-chaining data structure and also comprising a pointer to the namespace of a

4   template, wherein said searching uses said template-chaining data structure to find the

5   ancestor namespace declaration.